

**Commonwealth of Kentucky
Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
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**Draft Title V
AIR QUALITY PERMIT**

Permittee Name: Detrex Corporation
Mailing Address: 325 Emmett Avenue, Auxillary Building
Bowling Green, Kentucky 42101

Source Name: Detrex Corporation, Solvents Division, Parts Cleaning
Source Location: Same as above

Permit Type: Federally Enforceable Title V
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**John E. Hornback, Director
Division for Air Quality**

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SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application, which was determined to be complete on July 21, 2000, the Kentucky Division for Air Quality hereby authorizes the construction and operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto and shall become the final permit unless the U.S. EPA files an objection pursuant to 401 KAR 50:035, Section 21(3)).

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in the 401 KAR 50:035, Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

02 (01) Open Top Vapor Degreaser (Detrex model 2DM-700-25) using control option 4 in Table 2 of Subpart T: freeboard ratio of 1.0, reduced room draft, and superheated vapor.

APPLICABLE REGULATION: 40 CFR Part 63, Subpart T, National emission standards for halogenated solvent cleaning.

1. **Operating Limitations:** (Taken from 40 CFR 63.463, Batch vapor and in line cleaning machine standards.)

1. The cover shall be closed at all times unless processing work loads through the degreaser or unless either the solvent has been removed from the machine or maintenance or monitoring is being performed that requires the cover not be in place.
2. Parts shall be racked so that entrainment of solvent is avoided and full drainage is accomplished.
3. Parts shall be moved in and out of the degreaser at a vertical speed less than eleven (11) ft./minute.
4. Workload in the vapor zone shall be degreased until condensation ceases.
5. Parts shall be allowed to dry within the degreaser above the vapor zone until visually dry.
6. Porous or absorbent materials such as cloth, leather, wood, or rope shall not be degreased.
7. Work loads shall not occupy more than half of the degreaser's open top area.
8. Spray above the vapor level shall not be allowed.
9. Solvent leaks shall be repaired immediately or the degreaser shall be shut down.
10. Waste solvent shall not be disposed of or transferred to another party so that greater than twenty (20) percent by weight of the waste solvent can evaporate into the atmosphere. Waste solvent shall be stored only in closed containers.
11. Exhaust ventilation shall not exceed fifty (50) cfm per square foot of degreaser area unless necessary to meet OSHA requirements or control device requirements. Ventilation fans shall not be used near the degreaser opening.
12. During startup of each vapor-cleaning machine, the primary condenser shall be turned on before the sump heater.
13. During shutdown of each vapor-cleaning machine, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

14. When solvent is added or drained from any solvent cleaning machine, the solvent shall be transferred using threaded or other leak-proof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.
 15. Each solvent cleaning machine and associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the Administrator's satisfaction to achieve the same or better results as those recommended by the manufacturer.
 16. Each operator of a solvent cleaning machine shall complete and pass the applicable sections of the test of solvent cleaning operating procedures in appendix B to 40 CFR 63, Subpart T, if requested during an inspection by the Administrator.
 17. Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers. The closed containers may contain a device that would allow pressure relief, but would not allow liquid solvent to drain from the container.
2. **Emission Limitations:** None, the limitations for solvent degreasers consist of operating practices and control methods as stated elsewhere in this permit.
3. **Monitoring Requirements:** (Taken from 40 CFR 63.466, Monitoring procedures)
- Monthly:**
1. Any cover (working mode, downtime mode, and/or idling mode) shall be visually inspected to determine if it is opening and closing properly, completely covers the cleaning machine openings when closed, and is free of cracks, holes, and other defects.
 2. The hoist speed shall be determined by measuring the time that it takes for the hoist to travel a measured distance. If there are no exceedances of the hoist speed after one year, monitoring of the hoist speed may be done on a quarterly basis.
- Weekly:**
3. A thermometer or thermocouple shall be used to measure the temperature at the center of the superheated solvent vapor zone while the solvent cleaning machine is in the idling mode.
 4. Reduced room draft maintained by controlling room parameters shall be checked by an initial monitoring test of the windspeed and of room parameters. Thereafter, windspeed shall be monitored *quarterly* and room parameters shall be monitored *weekly*. Monitoring shall be done in the following manner:

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- a. Measure the windspeed within 6 inches above the top of the freeboard area of the solvent-cleaning machine using the following procedure:
 1. Determine the direction of the wind current by slowly rotating a velometer or similar device until the maximum speed is located.
 2. Orient a velometer in the direction of the wind current at each of the four corners of the machine.
 3. Record the reading for each corner.
 4. Average the values obtained at each corner and record the average wind speed.
5. An exceedance has occurred if the windspeed measured as described in 3.4 is greater than 50 feet per minute or if the owner/operator fails to establish and maintain the operating conditions under which the wind speed was demonstrated to be 50 feet per minute or less, and the condition has not been corrected within 15 days of detection. Adjustments or repairs shall be made to the solvent cleaning system or control device to reestablish required levels. The parameter must be remeasured immediately upon adjustment or repair and demonstrated to be within required limits. The owner/operator shall report all exceedances and all corrections and adjustments made to avoid an exceedance as specified in Condition 5, Specific Reporting Requirements.

4. Specific Record Keeping Requirements: (Taken from 40 CFR 63.467,
Recordkeeping requirements)

To be maintained in written or electronic form for the lifetime of the machines:

1. Owner's manuals, or written maintenance and operating procedures, for the solvent cleaning machine and control equipment.
2. The date of installation for the solvent cleaning machine and all of its control devices.
3. Records of the halogenated HAP solvent content for each solvent used in the permitted facilities.

To be maintained in written or electronic form for five (5) years:

6. The results of control device monitoring specified in Condition #3, Monitoring Requirements.
 7. Records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels.
 8. Estimates of annual solvent consumption for each solvent cleaning machine.
3. Information as to how monitoring of control methods is conducted, and how compliance with the following requirements will be achieved:

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- a. The owner or operator must establish and maintain the operating conditions such that flow or movement of air across the top of the freeboard area of the solvent cleaning machine or within the enclosure does not exceed fifty (50) feet per minute.
- b. The cover shall be in place whenever parts are not in the solvent cleaning machine and completely cover the machine openings when in place.
- c. The temperature of the solvent vapor at the center of the superheated vapor zone shall be at least ten (10) degrees Fahrenheit above the solvent's boiling point.
- d. The manufacturer's specifications for determining minimum proper dwell time within the superheated vapor zone shall be followed and the parts shall remain in the superheated vapor zone for that amount of time.

5. Specific Reporting Requirements: (Taken from 40 CFR 63.468, Reporting requirements.)

1. No later than 150 days after startup the owner and/or operator of the affected facilities specified on this permit shall furnish to the Division's Bowling Green Regional Office, with a copy to the Division's Frankfort Central Office, an initial statement of compliance containing:
 - a. A list of control equipment required to be monitored, a list of the parameters that are monitored and the values of these parameters measured on or during the first month after the compliance date.
 - b. Conditions to maintain the wind speed requirements for reduced draft emission control.
2. Each year the owner and/or operator shall submit a report by February 1 of the year following the one for which the reporting is being made, to include:
 - a. A signed statement from the facility owner or his designee stating that, "All operators of solvent cleaning machines have received training on the proper operation of solvent cleaning machines and their control devices sufficient to pass the test required in 40 CFR 63.463(d)(10)."
 - b. An estimate of solvent consumption for each solvent cleaning machine during the reporting period.
3. The owner and/or operator shall submit semiannually [may be increased to a quarterly or more frequent basis as described in 40 CFR 63.468(h)] an exceedance report to be delivered or postmarked by the 30th day following the end of each calendar half, to include the following:
 - a. All records pertaining to Condition #4 part 7 and part 9.
 - b. If an exceedance has occurred, the reason and the actions taken.
 - c. If no exceedances of a parameter have occurred, or a piece of equipment has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.
4. These Conditions 3-5 (Monitoring, Recordkeeping, and Reporting) are intended to convey the requirements of 40 CFR Part 63, Subpart T, as applicable to the affected facilities permitted herein. This does not release the owner/operator of this source from responsibility for any requirements of Subpart T. not specifically stated in this permit.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

03 (02) Monorail Vapor Degreaser (Detrex model 2DM-700-25) using control option 3 in Table 4 of Subpart T: superheated vapor and carbon adsorption.

APPLICABLE REGULATION: 40 CFR Part 63, Subpart T, National emission standards for halogenated solvent cleaning.

1. Operating Limitations: (Taken from 40 CFR 63.463, Batch vapor and in line cleaning machine standards.)

1. The cover shall be closed at all times unless processing work loads through the degreaser or unless either the solvent has been removed from the machine or maintenance or monitoring is being performed that requires the cover not be in place.
2. Parts shall be racked so that entrainment of solvent is avoided and full drainage is accomplished.
3. Parts shall be moved in and out of the degreaser at a vertical speed less than eleven (11) ft./minute.
4. Work load in the vapor zone shall be degreased until condensation ceases.
5. Parts shall be allowed to dry within the degreaser above the vapor zone until visually dry.
6. Porous or absorbent materials such as cloth, leather, wood, or rope shall not be degreased.
7. Work loads shall not occupy more than half of the degreaser's open top area.
8. Spray above the vapor level shall not be allowed.
9. Solvent leaks shall be repaired immediately or the degreaser shall be shut down.
10. Waste solvent shall not be disposed of or transferred to another party so that greater than twenty (20) percent by weight of the waste solvent can evaporate into the atmosphere. Waste solvent shall be stored only in closed containers.
11. Exhaust ventilation shall not exceed fifty (50) cfm per square foot of degreaser area unless necessary to meet OSHA requirements or control device requirements. Ventilation fans shall not be used near the degreaser opening.
12. During startup of each vapor cleaning machine, the primary condenser shall be turned on before the sump heater.
13. During shutdown of each vapor cleaning machine, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

14. When solvent is added or drained from any solvent cleaning machine, the solvent shall be transferred using threaded or other leakproof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.
15. Each solvent cleaning machine and associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the Administrator's satisfaction to achieve the same or better results as those recommended by the manufacturer.
16. Each operator of a solvent cleaning machine shall complete and pass the applicable sections of the test of solvent cleaning operating procedures in appendix B to 40 CFR 63, Subpart T, if requested during an inspection by the Administrator.
17. Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers. The closed containers may contain a device that would allow pressure relief, but would not allow liquid solvent to drain from the container.

2. **Emission Limitations:** None, the limitations for solvent degreasers consist of operating practices and control methods as stated elsewhere in this permit.

3. **Monitoring Requirements:** (Taken from 40 CFR 63.466, Monitoring procedures)

Monthly:

1. Any cover (working mode, downtime mode, and/or idling mode) shall be visually inspected to determine if it is opening and closing properly, completely covers the cleaning machine openings when closed, and is free of cracks, holes, and other defects.
2. The hoist speed shall be determined by measuring the time that it takes for the hoist to travel a measured distance. If there are no exceedances of the hoist speed after one year, monitoring of the hoist speed may be done on a quarterly basis.

Weekly:

3. A thermometer or thermocouple shall be used to measure the temperature at the center of the superheated solvent vapor zone while the solvent cleaning machine is in the idling mode.
4. The reduced room draft maintained by controlling room parameters shall be checked by an initial monitoring test of the windspeed and of room parameters. Thereafter, windspeed shall be monitored *quarterly* and room parameters shall be monitored *weekly*. Monitoring shall be done in the following manner:
 - a. Measure the windspeed within 6 inches above the top of the freeboard area of the solvent-cleaning machine using the following procedure:
 1. Determine the direction of the wind current by slowly rotating a velometer or similar device until the maximum speed is located.
 2. Orient a velometer in the direction of the wind current at each of the four corners of the machine.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Record the reading for each corner.
4. Average the values obtained at each corner and record the average wind speed.
5. An exceedance has occurred if the windspeed measured as described in 3.4 is greater than 50 feet per minute or if the owner/operator fails to establish and maintain the operating conditions under which the wind speed was demonstrated to be 50 feet per minute or less, and the condition has not been corrected within 15 days of detection. Adjustments or repairs shall be made to the solvent cleaning system or control device to reestablish required levels. The parameter must be remeasured immediately upon adjustment or repair and demonstrated to be within required limits. The owner/operator shall report all exceedances and all corrections and adjustments made to avoid an exceedance as specified in Condition 5, Reporting requirements.
6. The concentration of halogenated HAP solvent in the exhaust of the carbon adsorber shall be tested with a colorimetric detector tube according to the following procedure:
 - a. This test shall be conducted while the solvent cleaning machine is in the working mode and is venting to the carbon adsorber.
 - b. Use a colorimetric detector tube designed to measure a concentration of 100 parts per million by volume of solvent in air to an accuracy of ± 25 parts per million by volume.
 - c. Use the colorimetric detector tube according to the manufacturer's instructions.
 - d. Provide a sampling port for monitoring within the exhaust outlet of the carbon adsorber that is easily accessible and located at least 8 stack or duct diameters downstream from any flow disturbance such as a bend, expansion, contraction, or outlet; downstream from no other inlet; and 2 stack or duct diameters upstream from any flow disturbance such as a bend, expansion, contraction, inlet or outlet.

4. Specific Record Keeping Requirements: (Taken from 40 CFR 63.467, recordkeeping requirements)

To be maintained in written or electronic form for the lifetime of the machines:

1. Owner's manuals, or written maintenance and operating procedures, for the solvent cleaning machine and control equipment.
2. The date of installation for the solvent cleaning machine and all of its control devices.
3. Records of the halogenated HAP solvent content for each solvent used in the permitted facilities.

To be maintained in written or electronic form for five (5) years:

4. The results of control device monitoring specified in Condition #3, Monitoring Requirements.
5. Records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels.
6. Estimates of annual solvent consumption for each solvent cleaning machine.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

7. Information as to how monitoring of control devices is conducted, and how compliance with the following requirements will be achieved:
 - a. The owner or operator must establish and maintain the operating conditions such that flow or movement of air across the top of the freeboard area of the solvent cleaning machine or within the enclosure does not exceed fifty (50) feet per minute.
 - b. The cover shall be in place whenever parts are not in the solvent cleaning machine and completely covers the machine openings when in place.
 - c. The temperature of the solvent vapor at the center of the superheated vapor zone shall be at least ten (10) degrees Fahrenheit above the solvent's boiling point.
 - d. The manufacturer's specifications for determining minimum proper dwell time within the superheated vapor zone shall be followed and the parts shall remain in the superheated vapor zone for that amount of time.
 - e. The concentration of organic solvent in the exhaust from the carbon adsorber shall not exceed 100 parts per million of any halogenated HAP compound.
 - f. Ensure that the carbon adsorber bed is not bypassed during desorption.
 - g. Ensure that the lip exhaust is located above the solvent cleaning machine cover so that the cover closes below the lip exhaust level.
8. Records of the date and results of the weekly measurement of the halogenated HAP solvent concentration in the carbon adsorber exhaust required in Condition 3.6, Monitoring Requirements.

5. Specific Reporting Requirements: (Taken from 40 CFR 63.468, Reporting requirements.)

1. No later than 150 days after startup the owner and/or operator of the affected facilities specified on this permit shall furnish to the Division's Bowling Green Regional Office, with a copy to the Division's Frankfort Central Office, an initial statement of compliance containing:
 - a. A list of control equipment required to be monitored, a list of the parameters that are monitored and the values of these parameters measured on or during the first month after the compliance date.
 - b. Conditions to maintain the wind speed requirements for reduced draft emission control.
 - c. Date and results of the weekly measurement of the halogenated HAP solvent concentration in the carbon adsorber exhaust.
2. Each year the owner and/or operator shall submit a report by February 1 of the year following the one for which the reporting is being made, to include:
 - a. A signed statement from the facility owner or his designee stating that, "All operators of solvent cleaning machines have received training on the proper operation of solvent cleaning machines and their control devices sufficient to pass the test required in CFR 63.463(d)(10)."
 - b. An estimate of solvent consumption for each solvent cleaning machine during the reporting period.
3. The owner and/or operator shall submit semiannually [may be increased to a quarterly or more frequent basis as described in 40 CFR 63.468(h)] an exceedance report to be delivered or postmarked by the 30th day following the end of each calendar half, to include the following:
 - a. All records pertaining to Condition #4 part 7 and part 9.
 - b. If an exceedance has occurred, the reason and the actions taken.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- c. If no exceedances of a parameter have occurred, or a piece of equipment has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.
4. These Conditions 3-5 (Monitoring, Recordkeeping, and Reporting) are intended to convey the requirements of 40 CFR Part 63, Subpart T, as applicable to the affected facilities permitted herein. This does not release the owner\operator of this source from responsibility for any requirements of Subpart T. not specifically stated in this permit.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**04 (09) Crossrod Degreaser****Description:**

- Batch, superheated vapor degreaser-model 2DCR-500
- Control equipment: freeboard refrigeration device, superheated vapor, and carbon absorber (emission point 04) [40 CFR 63.463 (b)(2)(I) option 7]
- Automated parts handler with maximum speed of 11 feet per minute
- Low-level liquid control
- Vapor level control
- Primary condenser
- Freeboard ratio: 0.75
- Solvent used: trichloroethylene
- Solvent/air interface: 36 ft²

APPLICABLE REGULATION: 40 CFR Part 63, Subpart T, National Emission Standards for Halogenated Solvent Cleaning, applies to batch vapor cleaning machines using trichloroethylene, i.e., emission point 04(09).

1. Operating Limitations: [40 CFR 63.463, Batch Vapor and In-Line Cleaning Standards]

- a) The crossroad degreaser shall include a downtime cover or a reduced room draft.
 - i) If a downtime cover is utilized, it must completely cover the cleaning machine when in place and must be free of cracks, holes and other defects. Additionally, it shall be closed at all times unless processing work loads through the degreaser or unless either the solvent has been removed from the machine or maintenance or monitoring is being performed that requires the cover to not be in place.
 - ii) If a reduced room draft is used, the permittee shall ensure that the flow of air across the top of the freeboard area of the degreaser or within the degreaser enclosure does not exceed 50 feet per minute. The permittee shall establish and maintain the operating conditions under which the wind speed was demonstrated to be 50 feet per minute or less.
- b) The degreaser shall have a freeboard ration of 0.75 or greater
- c) Parts shall be moved in and out of the degreaser at a vertical speed of 11 feet per minute or less.
- d) The degreaser shall be equipped with a device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils.
- e) The degreaser shall be equipped with a vapor level control device that shuts off sump heat if the vapor level rises above the height of the primary condenser.
- f) The degreaser shall have a primary condenser.
- g) Solvent vapors shall be routed through a carbon adsorber.
- h) Based on 40 CFR 63.463 (b)(2)(i), the control combination shall include a freeboard refrigeration device, superheated vapor, and a carbon adsorber.
- i) The cleaned parts shall be oriented so that entrainment of solvent is avoided and full drainage is accomplished.
- j) Parts/baskets shall not be removed from the degreaser until dripping has stopped.
- k) During startup of the degreaser, the primary condenser shall be turned on before the sump heater.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- l) During shutdown of the degreaser, the sump heater shall be turned off and the solvent layer shall be allowed to collapse before the primary condenser is turned off.
 - m) When solvent is added to or drained from the degreaser, the solvent shall be transferred using threaded or other leakproof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.
 - n) Each operator of a solvent cleaning machine shall complete and pass the applicable sections of the test of solvent cleaning operating procedures in appendix B to 40 CFR 63, Subpart T, if requested during an inspection by the Administrator.
 - o) Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers. The closed containers may contain a device that would allow pressure relief, but would not allow liquid solvent to drain from the container.
 - p) Sponges, fabric, wood, and paper products shall not be cleaned.
 - q) The degreaser and its associated controls shall be maintained as recommended by the manufacturers of the equipment or by using alternative maintenance practices that have been demonstrated to the Administrator's satisfaction to achieve the same or better results as those recommended by the manufacturer.
2. **Emission Limitations:** None, the limitations for solvent degreasers consist of operating practices and control methods as stated elsewhere in this permit.
4. **Testing Requirements:** NA
5. **Monitoring Requirements:** [40 CFR 60.466, Monitoring Procedures]
- Monthly:**
- a) The permittee shall visually inspect the downtime cover to determine if it is opening and closing properly, completely covers the degreaser openings when closed, and is free of cracks, holes, and other defects.
 - b) The hoist speed shall be determined by measuring the time that it takes for the hoist to travel a measured distance. If there are no exceedances of the hoist speed after the first year, monitoring may be conducted on a quarterly basis.
- Weekly:**
- c) A thermometer or thermocouple shall be used to measure the temperature at the center of the air blanket during the idling mode.
 - d) A thermometer or thermocouple shall be used to measure the temperature at the center of the superheated vapor zone while the machine is idling.
 - e) A calorimetric detector tube shall be used to measure the halogenated HAP solvent concentration in the carbon adsorber exhaust.
 - f) The reduced room draft, maintained by controlling room parameters, shall be checked by an initial monitoring test of the windspeed and of room parameters. Thereafter, windspeed shall be monitored *quarterly* and room parameters shall be monitored *weekly*. Monitoring shall be done in the following manner:

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Measure the windspeed within 6 inches above the top of the freeboard area of the degreaser using the following procedure:

- i) Determine the direction of the wind current by slowly rotating a velometer or similar device until the maximum speed is located.
- ii) Orient a velometer in the direction of the wind current at each of the four corners of the machine.
- iii) Record the reading for each corner.
- iv) Average the values obtained at each corner and record the average wind speed.

6. **Specific Recordkeeping Requirements:** [40 CFR 63.467, Recordkeeping Requirements]

To be maintained in written or electronic form for the lifetime of the machine:

- a) Owner's manuals or written maintenance and operating procedures for the degreaser and control equipment.
- b) The date of installation of the degreaser and all of its control devices.
- c) Records of the halogenated HAP solvent content for each solvent used in the degreaser.

To be maintained in written or electronic form for a period of five years:

- d) The results of control device monitoring (Condition #3, Monitoring Requirements).
- e) Estimates of solvent consumption.
- f) Date and results of the weekly measurement of the halogenated HAP solvent concentration in the carbon adsorber exhaust.
- g) Action(s) taken to comply with 40 CFR 63.463(e): written/verbal orders for replacement parts, a description of the repairs/adjustments, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels, in order to avoid an exceedance.

7. **Specific Reporting Requirements:** [40 CFR 63.468, Reporting Requirements]

- a) The owner/operator shall submit an initial statement of compliance to the division's Bowling Green Office, with a copy to the division's Frankfort Central Office. This report shall be submitted no later than 150 days after startup and shall include the following:
 - i) A list of control equipment used to achieve compliance for the degreaser.
 - ii) A list of parameters that are monitored for each piece of control equipment, including the values of these parameters measured on or during the first month after the compliance date.
 - iii) Conditions to maintain the wind speed requirements for the reduced room draft, if applicable.
 - iv) The date and results of the weekly measurement of the halogenated HAP solvent concentration in the carbon adsorber exhaust.
- b) Each year, the permittee shall submit a report by February 1st of the year following the one for which the reporting is being made. This report shall include:
 - i) A signed statement from the facility owner or his designee stating that, "All operators of solvent cleaning machines have received training on the proper operation of solvent cleaning machines and their control devices sufficient to pass the test required in 40 CFR 63.463(d)(10)."
 - ii) An estimate of solvent consumption for each solvent cleaning machine during the reporting period.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- c) The permittee shall submit an exceedance report to the division's Bowling Green Office, with a copy to the Frankfort Central Office, on a semiannual basis except when the division determines that more frequent reporting is necessary to accurately assess the compliance status of the source or an exceedance occurs. Once an exceedance has occurred, the permittee shall follow a quarterly reporting format until a request to reduce reporting frequency is approved. Exceedance reports shall be postmarked or delivered by the 30th day following the end of each calendar half or quarter, as appropriate. The exceedance report shall include:
 - i) Information on the actions taken to comply with 40 CFR 63.463 (e), including the requirements of section B, condition 5(g).
 - ii) The reason for the exceedance and a description of the actions taken.
 - iii) If no exceedances of a parameter have occurred, or a piece of equipment has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.

8. Specific Control Equipment Operation Conditions: [40 CFR 63.463 (e)]

- a) Freeboard refrigeration device: the permittee shall ensure that the chilled air blanket temperature, measured at the center of the air blanket, is no greater than 30 percent of the solvent boiling point, i.e., 57°F.
- b) Reduced room draft (if applicable): the permittee shall establish and maintain the operating conditions under which the flow/movement of air across the top of the freeboard area of the degreaser or within the degreaser enclosure does not exceed 50 feet/minute and shall ensure that the flow/movement of air does not exceed 50 feet/minute.
- c) Carbon adsorber: the permittee shall ensure that the concentration of organic solvent in the exhaust from the carbon adsorber does not exceed 100 parts per million of any halogenated HAP compound and shall ensure that the carbon adsorber bed is not bypassed during desorption.
- d) Superheated vapor device: the permittee shall ensure that the temperature of the solvent vapor at the center of the superheated vapor zone is at least 10°F above the solvent's boiling point, i.e., 189°F.

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 50:035, Section 5(4). While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

DescriptionGenerally Applicable Regulation

4.1 mmBTU Clayton natural gas-fired
boiler used for process heat

401 KAR 59:015

SECTION D - SOURCE EMISSIONS, LIMITATIONS, AND TESTING REQUIREMENTS

NA

SECTION E - CONTROL EQUIPMENT CONDITIONS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.

Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

1. When continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a) Date, place as defined in this permit, and time of sampling or measurements.
 - b) Analyses performance dates;
 - c) Company or entity that performed analyses;
 - d) Analytical techniques or methods used;
 - e) Analyses results; and
 - f) Operating conditions during time of sampling or measurement;
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained at the source authorized by this permit for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality.
3. The permittee shall allow the Cabinet or authorized representatives to perform the following:
 - a) Enter upon the premises where a source is located or emissions-related activity is conducted, or where records are kept;
 - b) Have access to and copy, at reasonable times, any records required by the permit:
 - i) During normal office hours, and
 - ii) During periods of emergency when prompt access to records is essential to proper assessment by the Cabinet;
 - c) Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times shall include, but are not limited to the following:
 - i) During all hours of operation at the source,
 - ii) For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
 - iii) During an emergency; and
 - d) Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements. Reasonable times shall include, but are not limited to the following:
 - i) During all hours of operation at the source,
 - ii) For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
 - iii) During an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

**SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS
(CONTINUED)**

5. Summary reports of any monitoring required by this permit shall be submitted to the division's Bowling Green Regional Office at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation.

The reports are due within 30 days after the end of each six-month reporting period that commences on the initial issuance date of this permit. The permittee may shift to semi-annual reporting on a calendar year basis upon approval of the regional office. If calendar year reporting is approved, the semi-annual reports are due January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to Section 6(1) of 401 KAR 50:035, Permits. All deviations from permit requirements shall be clearly identified in the reports.

6. a. In accordance with the provisions of 401 KAR 50:055, Section 1, the owner or operator shall notify the Division for Air Quality's Bowling Green Regional Office concerning startups, shutdowns, or malfunctions as follows:
1. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 2. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall cause written notice upon request.
- b. In accordance with the provisions of 401 KAR 50:035, Section 7(1)(e) 2, the owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by general condition 6 a. above) to the Division for Air Quality's Bowling Green Regional Office within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by general condition F.5.

**SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS
(CONTINUED)**

7. Pursuant to 401 KAR 50:035, Permits, Section 7(2)(b), the permittee shall certify compliance with the terms and conditions contained in this permit, annually on the permit issuance anniversary date or by January 30th of each year if calendar year reporting is approved by the regional office, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Division for Air Quality's Bowling Green Regional Office and the U.S. EPA in accordance with the following requirements:
- a. Identification of each term or condition of the permit that is the basis of the certification;
 - b. The compliance status regarding each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent; and
 - d. The method used for determining the compliance status for the source, currently and over the reporting period, pursuant to 401 KAR 50:035, Section 7(1)(c),(d), and (e).
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
 - g. The certification shall be postmarked by the thirtieth (30) day following the applicable permit issuance anniversary date or by January 30th of each year if calendar year reporting is approved by the regional office. **Annual compliance certifications should be mailed to the following addresses:**

**Division for Air Quality
Bowling Green Regional Office
1508 Western Avenue
Bowling Green, KY 42104-3356**

**U.S. EPA Region IV
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St.
Atlanta, GA 30303-8960**

**Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601**

8. In accordance with 401 KAR 50:035, Section 23, the permittee shall provide the division with all information necessary to determine its subject emissions within thirty (30) days of the date the KEIS emission report is mailed to the permittee.
9. Pursuant to Section VII.3 of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the division by the source or its representative within forty-five days after the completion of the fieldwork.

SECTION G - GENERAL CONDITIONS**(a) General Compliance Requirements**

1. The permittee shall comply with all conditions of this permit. A noncompliance shall be (a) violation(s) of state regulation 401 KAR 50:035, Permits, Section 4 and for federally enforceable permits is also a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) and are grounds for enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit.
2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition.
3. This permit may be revised, revoked, reopened and reissued, or terminated for cause. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - i) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to Regulation 401 KAR 50:035, Section 5(7)(b) 3;
 - ii) If any additional applicable requirements of the Acid Rain Program become applicable to the source; [Acid Rain sources only]
 - iii) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
 - iv) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish to the Division, in writing, information that the Division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit.
5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority.
6. Any condition or portion of this permit, which becomes suspended or is ruled invalid as a result of any legal or other action, shall not invalidate any other portion or condition of this permit.

SECTION G - GENERAL CONDITIONS (CONTINUED)

7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance.
8. Except as identified as state-origin requirements in this permit, all terms and conditions contained herein shall be enforceable by the United States Environmental Protection Agency and citizens of the United States.
9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6).
10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance.
11. This permit shall not convey property rights or exclusive privileges.
12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.
13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry.
14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders.
15. Permit Shield: Except as provided in 401 KAR 50:035, compliance by the affected facilities listed herein with the conditions of this permit shall be deemed compliance with the specially identified applicable requirements as of the date of issuance of this permit.
16. All previously issued construction and operating permits are hereby subsumed into this permit.

SECTION G - GENERAL CONDITIONS (CONTINUED)**(b) Permit Expiration and Reapplication Requirements**

1. This permit shall remain in effect for five years after the date of issuance. The permit shall become null and void after the expiration date unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit.
2. Notwithstanding the provisions in General Condition (b)1, if the permitting authority has received an application for renewal, deemed it administratively complete, and failed to reissue the permit for reasons other than cause, authorization to operate shall continue beyond the expiration date to the point of permit modification, reissuance, or revocation.

(c) Permit Revisions

1. A permit revision shall not be required for changes that are explicitly authorized by the conditions of this permit.
2. A permit revision shall not be required for changes that are part of an approved economic incentive, marketable permit, emission trading, or other similar program or process which is specifically provided for in this permit.
3. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority thirty (30) days in advance of the transfer.

(d) Construction, Start-Up, and Initial Compliance Certification Requirements**Emission point 04 (09), crossrod degreaser**

1. Construction of process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
2. Within thirty (30) days following commencement of construction, and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Division for Air Quality's Bowling Green Regional Office in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
 - a) The date when construction commenced.
 - b) The date of start-up of the affected facilities listed in this permit.
 - c) The date when the maximum production rate specified in the permit application was achieved.
3. Pursuant to State Regulation 401 KAR 50:035, Permits, Section 5(6), unless construction is commenced on or before eighteen (18) months from the date of this permit or if construction is commenced and then stopped for any consecutive period of eighteen (18) months or more, then this permit shall become null and void.

SECTION G - GENERAL CONDITIONS (CONTINUED)

4. Operation of the affected facilities for which construction is authorized by this permit shall not commence until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055, except as provided in Section I of this permit.
5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall demonstrate compliance on the affected facilities in accordance with Regulation 401 KAR 50:055, General compliance requirements.

(e) Acid Rain Program Requirements

If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

(f) Emergency Provisions

1. An emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
 - i) An emergency occurred and the permittee can identify the cause of the emergency;
 - ii) The permitted facility was at the time being properly operated;
 - iii) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
 - iv) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency. The notice shall meet the requirements of 401 KAR 50:035E, Permits, Section 4(7), and include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken. This requirement does not relieve the source of any other local, state or federal notification requirements.
2. Emergency conditions listed in General Condition (f) 1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement.
3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof.

SECTION G - GENERAL CONDITIONS (CONTINUED)

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:
RMP Reporting Center
P.O. Box 3346
Merrifield, VA, 22116-3346
2. If requested, submit additional relevant information to the division or the U.S. EPA.

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVAC's) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d. Persons disposing of small appliances, MVAC's, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
 - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

SECTION H - ALTERNATE OPERATING SCENARIOS

NA

SECTION I - COMPLIANCE SCHEDULE

NA